# INDEX.


Acenaphthene, Effect on Ignition of Petrol, 278
Acetaldehyde, Effect of Lead Tetraethyl on Ignition, 251
  Effect on Ignition of Petrol, 279
  Effect of Petrol-lead Tetraethyl, 274
  Igniting Temperatures of, 258, 259, 262
  Surface Effect, 261, 262
Acetaldehyde-Petrol, Igniting Temperatures of, 271
Acetaniline, Effect on Ignition of Petrol, 280
Acetic Anhydide, Effect on Ignition of Petrol, 279
Acetone, Effect as Antiknock, 277
  Effect on Ignition of Petrol, 276, 279
  Igniting Temperatures of, 258, 262
Acetophenone, Effect on Ignition of Petrol, 279
Acetyl diphenylamine, Effect on Ignition of Petrol, 280, 303
Acetylene, Effect of Lead Tetraethyl on Ignition, 252
  Igniting Temperatures of, 260, 262
Acetylene Tetrabromide, Effect on Ignition of Petrol, 279
Acridine, Effect on Ignition of Petrol, 279
"Adlake" Lamp Burner, 399
Aesculin, Effect on Ignition of Petrol, 279
Air Drive, Use of in 1926, 496
Air Lift, Use of in 1926, 494
Alberta, Tar Sands, Utilisation of, 683-688
Alcohol, Effect of Lead Tetraethyl on Ignition, 251
  Igniting Temperature, Surface Effect, 261, 262
  Igniting Temperatures and H.U.C.R., 270
  Sulphuric Acid Action on, 849-854
Alcohol-Petrol, Igniting Temperatures of, 271
Aldehyde Ammonia, Effect on Ignition of Petrol, 280
Aldehydes, Effect on Ignition of Petrol, 279
Aliphatic Hydrocarbons, Refraction of, 413
Aluminium, Effect on Ignition of Petrol, 247, 248
Aluminium Triethyl, Effect on Ignition of Petrol, 303
8-Aminoquinoline, Effect on Ignition of Petrol, 280
Amylalcohol, Effect of Lead Tetraethyl on Ignition, 251
  Effect on Ignition of Petrol, 279
  Igniting Temperatures of, 259, 262
Amylene, Refraction of, 413
  Refraction and Dispersion of, facing 414
*m*-Amylene, Aniline Point of, 798
Amylene Hydrate, Effect of Lead Tetraethyl on Ignition, 251
  Igniting Temperatures of, 259, 262
Analysis of Oil, Progress in 1926, 595-597
Ancon, Ecuador, Geology of, 442
Aniline, Effect as Antiknock, 277
  Effect on Ignition of Petrol, 276, 279, 303
  Igniting Temperatures of, 258, 262
  Effect of acetaldehyde, 275
*m*-Anisidine, Effect on Ignition of Petrol, 280
*o*-Anisidine, Effect on Ignition of Petrol, 280
*p*-Anisidine, Effect on Ignition of Petrol, 280
Anisole, Effect on Ignition of Petrol, 279
Annual Dinner, Ninth, Speeches at, 825-843
Annual General Meeting, Fourteenth, 214-223
Annual Report of Council, 1926, 207-213
Anthracene, Effect on Ignition of Petrol, 278
Anthraquinone, Effect on Ignition of Petrol, 280
Anti-Detonators, Progress in 1926, 578-581
Antiknock, Effect of Metallic Vapours as, 244-255
  Oxidation of, 254-255
  Theories of, 281-299
Antiknock Dopes, 300-307
Antimony, Effect on Ignition of Petrol, 247, 248
Arakan Coast, Burma, Oilfields of, 30
*Arca Bistrigata*, Noet., 46
*Arca Burnesi*, d'Arch., 49
*Arca Theobaldi*, Noet., 49
Argand Lamp, 364,365
Aromatics, Sulphuric Acid Action on, 311-320
Arsenic, Effect on Ignition of Petrol, 247
Asphalts, Progress in 1926, 587-592
Assam, Oilfield of, 649-650

*Athleta Jacobsi*, Vred., 42, 43, 46, 47
Australia, Cannel Coals in, 663-664
Petroleum Prospects in, 652-653
Azobenzene, Effect on Ignition of Petrol, 280
Azoxybenzene, Effect on Ignition of Petrol, 280

Barbados, Oilfield of, 651
Progress in 1926, 611
Barium, Effect on Ignition of Petrol, 247
"Barton" Lamp Burner, 399
Bean Control of Wells, 493-494, 742-755
Beme, Burma, Oil Reserves of, 27
Benzal Aniline, Effect on Ignition of Petrol, 280
Benzaldehyde, Effect on Ignition of Petrol, 279
Igniting Temperatures of, 258
Benzene, Aniline Point of, 798
Effect as Antiknock, 277
Effect of Lead Tetraethyl on Ignition, 251
Effect on Detonation, 121
Effect on Ignition of Petrol, 276, 278
Igniting Temperatures of, 258
Igniting Temperatures and H.U.C.R., 270
Ignition Point of, 257
Limits of Inflammability, 106
Refraction of, 413
Refraction and Dispersion of, facing 414
Benzidine, Effect on Ignition of Petrol, 280
Benzil, Effect on Ignition of Petrol, 279
Benzoyl Acetone, Effect on Ignition of Petrol, 280
Benzoyl Peroxide, Effect on Ignition of Petrol, 279
Benzonitrile, Igniting Temperatures of, 258
Benzophenone, Effect on Ignition of Petrol, 279
Berginisation, 413-423
Fuels from, 696-702
Beryllium, Effect on Ignition of Petrol, 247
Bismuth, Effect on Ignition of Petrol, 247, 248
Bismuth Triethyl, Effect on Ignition of Petrol, 250
Bismuth Triphenyl, Effect on Ignition of Petrol, 250, 303
Bituminous Emulsions, Progress in 1926, 590-591
Boric Triethyl, Effect on Ignition of Petrol, 303
Borneo, British North, Petroleum Prospects in, 655
Boron, Effect on Ignition of Petrol, 247
British Empire, Auxiliary Fuel Sources, 681-712
Oil Consumption in, 641
Economics of Petroleum Situation, 628-648
Petroleum, Prospects and Production, 649-666
Prospects of, Conditions Affecting, 617-627
Petroleum Refinery Statistics, 671, 672
Petroleum Refining in, 667-680
Chemicals Required, 674
British Guiana, Petroleum Prospects in, 654
*o*-Bromaniline, Effect on Ignition of Petrol, 280
Burma, Eocene Rocks of, 32-34
Geology of, 22-24
Lithological and Palæontological Horizons, Mapping of, 50
Marine Peguan, Palæontology of, 40-50
Oil Occurrence, Conditions Governing, 21-71
Oil-bearing Rocks, Disposition of, 36-40
Oilfields of, 649
Peguan, Standard Faunas of, 40-50
Peguan-Irrawaddian Rocks of, 34-36
Tertiary Rocks of, 30-36
Burning Test of Kerosine, 402-409
*n*-Butylalcohol, Igniting Temperatures of, 259

Cadmium, Effect on Ignition of Petrol, 247, 248
Caesium, Effect on Ignition of Petrol, 247
Calcium, Effect on Ignition of Petrol 247, 248
Camphor, Effect on Ignition of Petrol, 279
Canada, Cannel Coals in, 662-663
Lignites in, 663
Oil and Gas in 1926, 607-609
Oil-shales in, 661-662
Oilfields of, 650-651
Petroleum Prospects in, 655-656
Caprylene, Distillates from, Refraction and Dispersion of, 417-418

Caprylene—*continued*
Refraction and Dispersion of, facing 414
Carbazole, Effect on Ignition of Petrol, 279
Carbon Arc, Effect on Ignition of Petrol, 248
Carbon Bisulphide, Effect of Lead Tetraethyl on Ignition, 251
Effect on Ignition of Petrol, 279
Igniting Temperatures of, 258, 262
Ignition Point of, 257
Carbon Bisulphide-Petrol, Igniting Temperatures of, 264-265, 271
Carbon Monoxide, Effect of Lead Tetraethyl on Ignition, 252
Igniting Temperatures of, 260, 262
Limits of Inflammability, 106
Carbon Ratio, 308-301
Carbon Tetrachloride, Effect on Ignition of Petrol, 279
Carbon Tetrachloride-Petrol, Igniting Temperatures of, 264-265, 271
*Cardita Viquesneli*, d'Arch, 48, 49
*Cardium Subrugosum*, Noet, 49
Casing, Oil-well, 729-741
Collapsed, 734-736
Collar, 731-732
Handling of, 732-734
Inserted-joint, 730-731
Riveted, 729-730
Stove Pipe, 729
*Cassidaria Echinophoria*, Vred., 44, 49
*Cassidea Birmanica*, Vred., 43
*Cassideae Echinophora*, Noct., 43, 47
Cedford Gas Process, 703
*Centrophorus Acus*, Squalene in, 4
*Centrophorus Atromarginatus*, Squalene in, 4
*Centrophorus Calceus*, Squalene in, 4
*Centrophorus Granulosus*, Liver Oils of, 2
Squalene in, 4
*Centrophorus Scymnosus*, Squalene in, 4
*Centroscyllium Ritteri*, Squalene in, 4
*Centroscymnus Coelolepis*, Squalene in, 4
*Centroscymnus Owstonii*, Squalene in, 4
Cerium, Effect on Ignition of Petrol, 247, 248
*Cetorhinidæ*, Squalene in, 4
*Cetorhinus Maximus*, Squalene in, 4
Chak Dalla, Punjab, Petroleum at, Age of, 339, 727
Chalgah, Persia, Bitumen at, 323
Chemistry of Petroleum, Progress in 1926, 509-516
*Chlamedoselachidæ*, Squalene in, 4
*Chlamedoselachus Anguineus*, Squalene in, 4
Chromium, Effect on Ignition of Petrol, 247
Chromium Carbonyl, Effect on Ignition of Petrol, 303
Chrysene, Effect on Ignition of Petrol, 278
*Cirhigaleus Barbifer*, Squalene in, 4
*Clavatula Birmanica*, Vred., 43
*Clavatula Protonodifera*, Noet., 42, 43
*Clavilithes Seminudus*, Noet., 42, 43, 48
Coal, Arley, Berginisation Results, 700
Berginisation Yields from, 698
Cannel, Calorific Value of, 360
Examination of, 349-352
Lignitic, Examination of, 348-9
Low-temperature Yields, 167, 171
Oil from, 151-180
Coal and Oil, Connection Between, 37-40
Cobalt, Effect on Ignition of Petrol, 247
Cobalt Acetylacetone, Effect on Ignition of Petrol, 303
Combustion, Internal, Factors Affecting, 101-123
*Conus Bonneti, Cossm*, 44
*Conus Galensis*, Noet., 42, 43
*Conus Lanza*, Noet., 44
*Conus Ineditus*, Mich., 41, 42, 43, 46, 47, 48
*Conus Odengensis*, Noet., 42, 43, 47, 48, 49
*Conus Protofurvus*, Noet., 41, 43, 44, 46, 48
*Conus Yuleianus*, Noet., 44, 49
Copper, Effect on Ignition of Petrol, 247, 248
Corrosion by Oil, 760-792
Coumarin, Effect on Ignition of Petrol, 279
Cracked Distillates, Composition of, 794-824
Cracking of Oil, Progress in 1926, 568-578
Crank-case Dilution, 872-873
*Crassatella*, 49
Cross Cracking Process, Progress in 1926, 534
*Cryptospira Birmanica*, Vred., 44, 48, 49
Cumene, Aniline Point of, 798
Cyclohexane, Distillation of, 803, 804
Effect of Lead Tetraethyl on Ignition, 251
Ignition Point of, 257
Igniting Temperatures of, 258, 226
Igniting Temperatures and H.U.C.R., 270
Refraction of, 413
Refraction and Dispersion of, facing 414

Cyclohexene, Distillates from, Refraction and Dispersion of, 418-419
Molecular Weight of, 418
Refraction and Dispersion of, facing 414
Cymene, Refraction and Dispersion of, facing 414
*Cypræa Oppenheimi*, Vred., 42, 43
*Cypræa Singuensis*, Vred., 43
*Cyriochetus Minbuensis*, Noet., 42

*Deania Eglantina*, Liver Oils of, 2
Decalin, Refraction and Dispersion of, facing 414
Decane, Igniting Temperatures of, 258
Deep Creek Oilfield, Texas, 191-196
Detonation, 866-872
Suppression Effect of Compounds, 121, 122
Diazobenzolimide, Effect on Ignition on Petrol, 280
Diethylamine, Effect on Ignition of Petrol, 280
Diethyl Malonate, Effect on Ignition of Petrol, 278
Diethyl Sulphide, Effect on Ignition of Petrol, 303
Di-isoamyl, Aniline Point of, 798
Di-isopropyl, Physical Constants of, 810
Dimethylaniline, Effect of Lead Tetraethyl on Ignition, 251
Effect on Ignition of Petrol, 276, 280
Igniting Temperatures of, 258, 262
Dimethylcyclohexane, Refraction and Dispersion of, facing 414
Dimethylglyoxime, Effect on Ignition of Petrol, 280
Dimethyl Pentamethylene, Physical Constants of, 810
Dimethyl 3—5 Pyrazol, Effect on Ignition of Petrol, 280, 303
Dimethyl-pyrone, Effect on Ignition of Petrol, 279
Dipentene, Effect on Ignition of Petrol, 278
Diphenyl, Effect on Ignition of Petrol, 278
Diphenylamine, Effect as Antiknock, 277
Effect on Ignition of Petrol, 276, 280, 303
Diphenyl Carbazide, Effect on Ignition of Petrol, 279
Diphenylether, Effect on Ignition of Petrol, 279
Diphenyl Hydrazine, Effect on Ignition of Petrol, 280
Diphenylmethane, Effect on Ignition of Petrol, 278
Di-phenylurea, Effect on Ignition of Petrol, 279
Igniting Temperatures, Effect of Acetaldehyde, 275
Distillates, Cracked, Composition of, 794-824
Heavy, Progress in 1926, 587-592
Distillation, Continuous, Laboratory Pipe Still for, 91-100
*Drillia Cotteri*, Vred., 44
*Drillia Kamænsis*, Vred., 44
*Drillia Promensis*, Vred., 44
*Drillia Protointerrupta*, Noet., 42
*Drillia Protocincta*, Noet., 44
Drilling Methods, Progress in 1926, 500-502
Dubbs Cracking Progress, Progress in 1926, 533-534

*Eburna Lutosa*, Lamk., 44
Ecuador, Climate of, 434-435
Petroleum Distribution, 456-458
Petroleum Indications, 458-460
Santa Elena Peninsula, Geology of, 424-461
Empire Mining and Metallurgical Congress, Second, 617-724
Engines, Diesel, Progress in 1926, 601-607
Internal Combustion, Load Conditions, 865-874
"Pinking" in, 224-243
Estonia, Shale-oil Distillates, Composition of, 612-615
Ether, Effect of Lead Tetraethyl on Ignition, 251
Effect on Ignition of Petrol, 279
Effect on Petrol-lead Tetraethyl, 274
Ignition Point of, 257
Igniting Temperature of, 262
Igniting Temperatures and H.U.C.R., 270
Ether-Petrol, Igniting Temperatures of, 271
Ethylalcohol, Igniting Temperatures of, 258, 259, 262
Limits of Inflammability, 106
Ethylether, Igniting Temperatures of, 258
Ethyl Iodide, Effect on Ignition of Petrol, 303
Ethyl Mercaptan, Effect on Ignition of Petrol, 303
*Etmopterus Lucifer*, Squalene in, 4
*Etmopterus Spinax*, Squalene in, 4
Eugenol, Effect on Ignition of Petrol, 279

Fish Liver Oils, Berginisation of, 1-20
Fluid Flow, Regulation of Velocity, 725, 726
Fluorene, Effect on Ignition of Petrol, 278
Fluorenone, Effect on Ignition on Petrol, 280
Formamide, Effect on Ignition of Petrol, 280
Fractionating Columns, U.S. Patents in 1926, 563-564
Fractionating Processes, U.S. Patents in 1926, 564-566
Fractionation, Progress in 1926, 546-567
Fuel, Synthetic, Progress in 1926, 597-601
Fuel Oils, Progress in 1926, 587-592
Fuel Research Station, Work of, 151-180
Fuller's Earth, Analysis of, 325
  Use in Petroleum Industry, 325-330

Gallium, Effect on Ignition of Petrol, 247
Gas Drive, Use of in 1926, 496
Gas Lift, Use of in 1926, 494-495, 508-509
Gas, Natural, Progress in 1926, 505-509
Gasoline, Natural-gas, Extraction Plants, 505-507
  Stabilisers, 507-508
*Genotia Iravadica*, Noet., 42, 43, 47
*Genotia Singuensis*, Vred., 43
Germanium, Effect on Ignition of Petrol, 247
Glycocoll, Effect on Ignition of Petrol, 278
Gold, Effect on Ignition of Petrol, 247, 248
Gold Coast, Petroleum Prospects in, 653
Gray-King Assay Apparatus, for Coal Carbonisation, 155-157
Great Britain, Cannel Coals in, 658-660
  Lignites in, 660
  Oil Imports, 1925-6, 642
  Oil-shales in 657-658
  Petroleum Prospects in, 656
  Petroleum Refining Statistics, 1925-6, 669
Grosny, Russia, Vaseline from Oil, 589-590
Gulf Coast Field, U.S.A., Oil Indications of, 333-339
*Gypsina Globulus*, Reuss., 45

Heat Transfer, Progress in 1926, 546-550
Heptane, Aniline Point of, 798
  Distillates from, Refraction and Dispersion of, 415
  Effect of Lead Tetraethyl on Ignition, 251
  Ignition Point of, 257
  Igniting Temperatures of, 258, 262
  Igniting Temperature and H.U.C.R., 270
  Molecular Weight of, 416
  Refraction and Dispersion of, facing 414
*n*-Heptane, Physical Constants of, 810
Hexadecene, Distillates from, Refraction and Dispersion of, 420
  Refraction and Dispersion of, facing 414
Hexane, Aniline Point of, 798
  Distillation of, 803, 804
  Ignition Point of, 257
  Igniting Temperatures of, 258
  Igniting Temperature and H.U.C.R., 270
  Refraction and Dispersion of, facing 414
*n*-Hexane, Physical Constants of, 810
Hexamethylene, Physical Constants of, 810
Hexaozonide, 3
*n*-Hexylene, Aniline Point of, 798
*Hindsia Birmanica*, Vred., 42, 46
*Hindsia Neacolumbrina*, Noet., 44
*Hindsia Neastriatula*, Noet., 42
*Hindsia Pardalis*, Noet., 42
Hink's Duplex Burner, 366
*Hipparion Gracile*, Kaup., 323
Historical Records of Oil, 124-134
Holmes-Manley Cracking Process, Progress in 1926, 533
Hydrocarbon Mixtures, Technical Chemical Investigation of, 413-423
Hydrogen, Effect of Lead Tetraethyl on Ignition, 252
  Igniting Temperatures of, 260, 262
  Limits of Inflammability, 106
Hydroquinone, Effect on Ignition of Petrol, 279
  Igniting Temperature, Effect of Acetaldehyde, 275

Ignition Temperatures, Combustion Effect, 264, 268-269
  Conditions Affecting, 260-268
  Drop Behaviour, 260-261
  Ionisation, 265-266
  Mixtures, 264-265
  Pressure Effect, 269-270
  Quantity Effect, 261

Ignition Temperatures—*continued*
Significance of, 256-272
Spark Ignition, 264
Surface Effect, 261-263
Vapour and Liquid, 245
Indaw, Burma, Oilfield of, 24-26
Petroleum, Production of 1918-1925, 26
India, North-West, Oilfield, Geology of, 339-340, 727-728
Indications of Oil, Surface, Significance of, 333-339
Indium, Effect on Ignition of Petrol, 247
Insecticides, Kerosine as, 400
Progress in 1926, 593
Internal Combustion, Factors Affecting, 101-123
Internal Combustion Engines, Tests on, facing 118
Internal Combustion Processes, Study of, 104-123
Iodine, Effect on Detonation, 121
Effect on Ignition of Petrol, 247, 248
Iodoform, Effect on Ignition of Petrol, 279
Iron, Effect on Detonation, 122
Effect on Ignition of Petrol, 247, 248
Iron Acetylacetone, Effect on Ignition of Petrol, 303
Iron Carbonyl, Effect on Ignition of Petrol, 250, 303
Iron Pentacarbonyl, Effect on Detonation, 122
Isoamylene, Aniline Point of, 798
Isodecane, Aniline Point of, 798
Refraction of, 413
Isohexane, Effect of Lead Tetraethyl on Ignition, 251
Igniting Temperatures of, 258, 262
Isopentane, Aniline Point of, 798
Refraction and Dispersion of, facing 414
Isopropylalcohol, Igniting Temperatures of, 259, 262
Isopropyl Nitrate, Effect on Ignition of Petrol, 280

Jet, 343-362
Calorific Value of, 360
Distillation of, 347
Jetonised Material, 343-362.

Kabakki, Punjab, Rocks at, 340, 727
Kama, Burma, Fauna, 43-44
Kerosines, Analysis of, 398
Boiling-points of, 378
Burning of in Lamps, 364-397
Kerosines—*continued*
Burning Tests of, 402-409
Candle Power of, 380-382
Capillarity of, 379
Commercial, Analyses of, 368
Detonation, Effect of Compounds, 121
Flow of Through Wick, 403
Igniting Temperatures of, 258, 262
Long-time Burning, 410-412
Uses of, 398-401
Viscosities of, 377
Ketones, Effect on Ignition of Petrol, 279
Khadda Sur, Persia, Bitumen at, 323
Khaur, Punjab, Petroleum at, 340
Kundal, Punjab, Petroleum, Age of, 339
Kyune Canyon, Colorado, Lignitic Coal from, 348-349

*Lacinia Minbuensis*, Vred., 42, 43
Lamp Chimney, Bloom Formation on, 369-371, 390, 391
Lamps, Wick-fed, Burning of Mineral Oils in, 364-397
*Lathyrus Gautama*, Noet., 44
*Lathyrus Indicus*, Vred., 42
Lead, Effect on Detonation, 121
Effect on Ignition of Petrol, 247, 248
Lead Ethyl, Effect on Ignition of Petrol, 250
Lead Tetraethyl, Effect on Detonation, 122
Effect on Ignition of Petrol, 303
*Leda Birmanica*, Noet., 48
*Lepidorhinus Kinbei*, Squalene in, 4
*Lepidorhinus Squamosus*, Squalene in, 4
Lignite, Sumatra, Examination of, 347-348
*l*-Limonene, Aniline Point of, 798
Lithium, Effect on Ignition of Petrol, 247
Long-Time Burning Oil, 410-412
Louisiana, Oil Indications in, 333-337
Low-Temperature Carbonisation, 151-180
Assay Apparatus, 155-157
Experimental Retort, 160
Fuels from, 688-696
Liquor Composition, 172
Retort Settings, 158, 162
Tar Oil Composition, 173
Low-temperature Tar, Treatment of, 173
Lubricants, Progress in 1926, 581-587
Lubricating Oil, Contact Filtration of, 535
Corrosion by, 760-792
Oxidation of, 583-584

Magnesium, Effect on Ignition of Petrol, 247, 248
Maidan-i-Naftun, Persia, Natural Gas, Use of, 331-332
Mamatain, Persia, Bitumen at, 323
Manganese, Effect on Ignition of Petrol, 247, 248
Manganese Acetylacetone, Effect on Ignition of Petrol, 303
*Marginella singuensis*, Vred., 43
Masut, Progress in 1926, 588-589
*Meiocardia metavulgaris*, Noet., 48
*Melongena acanthina*, Dalton, 43, 47
*Melongena praeponderosa*, Vred., 43, 47
*Melongena pseudobucephala*, Noet., 47
Mercury, Effect on Ignition of Petrol, 247, 248
Mercury Diethyl, Effect on Ignition of Petrol, 303
*Merica pseudocancellata*, Noet., 42
Mesityl Oxide, Effect on Ignition of Petrol, 279
Mesitylene, Effect on Ignition of Petrol, 278
Metallic Vapours, Effect on Ignition of Petrol, 244-255
Metaphenylene-diamine, Effect on Ignition of Petrol, 280
Metaxylene, Refraction and Dispersion of, facing 414
Methane, Effect of Lead Tetraethyl on Ignition, 252
  Igniting Temperatures of, 260, 262
Methyl Alcohol, Limits of Alcohol, 106
Methylcyclohexane, Effect of Lead Tetraethyl on Ignition, 251
  Igniting Temperatures of, 258
  Refraction of, 413
  Refraction and Dispersion of, facing 414
Methylcyclohexene, Distillates from, Refraction and Dispersion of, 419
Methyl Hexamethylene, Physical Constants of, 810
Methyl Pentamethylene, Physical Constants of, 810
Metol, Effect on Ignition of Petrol, 279
Mexico, Potrero No. 4, Closing-in of, 71-90
Mid-Continent Field, U.S.A., Oil Indications of, 333-339
Midlothian, Cannel Coal from, 351-352
Mimbu, Burma, *Cancellaria martiniana* Fauna, 42-43
  Oilfield of, 28-29
  Petroleum, Production of, 1914-1925, 29
Minhla, Burma, Oilfield of, 28
  Petroleum, Production of, 29
*Mitra singuensis*, Vred., 43
Molybdenum, Effect on Ignition of Petrol, 247
Motor Fuel, Ignition of, Effect of Metallic Vapours, 244-255
  Igniting Temperatures and Behaviour, 270-271
  Purity of, 873
Motor Spirit, 855-874
  Cracked, Composition of, 805-815
  Starting and Acceleration, 859-865
  Volatility of, 856-859
Mulla Khel, Punjab, Rocks at, 340, 727
*Murex arakanensis*, Noet., 42
*Murex Iravadicus*, Vred., 42

Naphthalene, Effect on Ignition of Petrol, 278
  From Coal-Gas, Kerosine as Solvent, 399-400
Naphthenic Acids, Progress in 1926, 594
*a*-Naphthol, Effect on Ignition of Petrol, 279
*a*-Naphthylamine, Effect on Ignition of Petrol, 276, 280
*b*-Naphthylamine, Effect on Ignition of Petrol, 280
New Guinea, Petroleum Prospects in, 655
  Shallow Oil of, 357
New Mexico, Oil Indications in, 337
New South Wales, Torbanite from, 352
New Zealand, Petroleum Prospects in, 653
Newfoundland, Petroleum Prospects in, 654
Ngahlaingdwin, Burma, Oilfield of, 29
Nickel, Effect on Ignition of Petrol, 247, 248
Nickel Carbonyl, Effect on Ignition of Petrol, 250, 303
Nickel Tetracarbonyl, Effect on Detonation, 122
Nigeria, Petroleum Prospects in, 653
Niobium, Effect on Ignition of Petrol, 247
Nitroanisol, Effect on Ignition of Petrol, 280
Nitrogen, Effect on Detonation, 121
Nitrophenol, Effect on Ignition of Petrol, 280
Nitrosobenzol, Effect on Ignition of Petrol, 280

Nova Scotia, Torbanite from, 352
*Nummulites* ***yarvensis***, Cotter., 45
Nyasaland, Petroleum Prospects in, 654

Octane, Aniline Point of, 798
Distillates from, Refraction and Dispersion of, 416
Ignition Point of, 257
Molecular Weight of, 417
Refraction of, 413
Refraction and Dispersion of, facing 414
Oil and Coal, Connection between, 37-40
Oil-yielding Material, Retortable, Progress in 1926, 502-505
Oilfield Practice, Progress in 1926, 493-499
Oilfields, Shallow, Study of, 181-206
Olefines, Sulphuric Acid Action on, 845-849
Oles, Spain, Jet from, 345
"Olinda Well 96," 500-501.
*Oliva Australis*, Vred., 44, 48, 49
*Olivancillaria nebulosa*, Sow., 43, 47
*Olivella minbuensis*, Vred., 42, 46, 48
*Operculina carolifera*, d'Orb., 45
Organic Compounds, Effect on Knocking of Petrol, 273-280
Effect on Petrol Igniting Temperatures, 273-280
Origin of Petroleum, 1-20.
Orthobromaniline, Effect on Ignition of Petrol, 280
*Orthophragmina Omphalus*, Fritsch, 45
Oxidation Products, Progress in 1926, 593
Oxydate Lamp, 365

Padaukpin, Burma, Oilfield of, 29
Petroleum, Production of 1922-1926, 29
Palanyon, Burma, Oilfield of, 28
Petroleum, Production of, 1914-1925, 29
Paraffin, Effect on Ignition of Petrol, 278
Paraffins and Naphthenes, Separation of, 801-805
Paraffin Wax, Catalytic Cracking of, 422-423
Progress in 1926, 592
Refraction and Dispersion of, 421, 423
Vapour Phase Cracking of, 420-421
Paraldehyde, Effect on Ignition of Petrol, 279
*Parallelipipedum prototortuosum*, Noet., 48, 49
Paraxylene, Refraction and Dispersion of, facing 414
Pauk, Burma, Oilfield of, 29
Peguan Series, Palæontological Stages of, 44-50
Pentane, Aniline Point of, 798
Effect of Lead Tetraethyl on Ignition, 251, 252
Ignition Point of, 257
Igniting Temperatures of, 258, 259, 262
Surface Effect, 261
Igniting Temperature and H.U.C.R., 270
Refraction of, 413
Refraction and Dispersion of, facing 414
Persia, Kerosine, Analysis of, 398
Pliocene Oil Seepages in, 321-324
*Persona reticulata*, d'Orb, 43
Petrol, Constituents of, 858
Detonation, Effect of Compounds, 122
Effect of Lead Tetraethyl on Ignition, 251
Igniting Temperatures of 258, 259, 262
Effect of Organic Compounds, 273-280
Surface Effect, 261, 262
Igniting Temperature and H.U.C.R., 270
Ignition of, Effect of Metallic Vapours, 244-255
Limits of Inflammability, 106
Knocking, Effect of Organic Compounds, 273-280
Petrol-Acetaldehyde, Igniting Temperatures of, 271
Petrol-Alcohol, Igniting Temperatures of, 271
Petrol-Carbon Bisulphide, Igniting, Temperatures of, 264-265, 271
Petrol-Carbon Tetrachloride, Igniting Temperatures of, 264-265, 271
Petrol-Ether, Igniting Temperatures of, 271
Petroleum, Historical Records, 124-134
Phenacetine, Effect on Ignition of Petrol, 280
Phenanthrene, Effect on Ignition of Petrol, 278
*p*-Phenetidine, Effect on Ignition of Petrol, 280, 303
Phenols, Effect on Ignition of Petrol, 279

Phenols—*continued*
Igniting Temperatures of, 258, 262
Effect of Acetaldehyde, 275
Phenyl Hydrazine, Effect on Ignition of Petrol, 280
Phenyl Hydroxylamine, Effect on Ignition of Petrol, 280
Phosphorus, Effect on Ignition of Petrol, 247, 249
Phthalimide, Effect on Ignition of Petrol, 280
Pinene, Berginisation of, 8-10
"Pinking" in Engines, 224-243
Detonation Theory, 228-229, 234-237
Factors Affecting, 231-234
Flame Vibration Theory, 229, 242
Nuclear Theory, 229-231, 240-242
Spontaneous Ignition Theory, 224-228, 237-240
Pipe Still, Laboratory, for Continuous Distillation, 91-100
Results from, 531-532
Piperidine, Effect on Ignition of Petrol, 279
Piperonal, Effect on Ignition of Petrol, 279
*Pirula concinna, Beyr*, 43
*Pirula conditu*, Brongn, 42, 43, 47
*Pirula promensis*, Vred., 44, 48, 49
Platinum, Effect on Ignition of Petrol, 247
*Pleurotoma singuensis*, Vred., 43
*Pleurotoma yenanensis*, Noet., 41
Pliocene, Oil Seepages in Persia, 321-324
Potassium, Effect on Ignition of Petrol, 247, 248
Potrero No. 4, Mexico, Closing-in of, 71-90
Power Alcohol, Empire Sources of, 681-682
*Pristiurus pilosus*, Squalene in, 4
*n*-Propylalcohol, Igniting Temperatures of, 259, 262
Punjab, Oilfield of, 650
Geology of, 339-340, 727-728
*Purpura singuensis*, Vred., 43
Pyramidon, Effect on Ignition of Petrol, 280, 303
Pyridine, Effect on Ignition of Petrol, 279
Pyrocatechol, Effect on Ignition of Petrol, 279

Queensland, Oil-shale of, 357-358
Quinhydrone, Effect on Ignition of Petrol, 280
Quinoline, Effect on Ignition of Petrol, 279
Quinone, Effect as Antiknock, 277
Effect on Ignition of Petrol, 276, 279, 280
Igniting Temperature, Effect of Acetaldehyde, 275
Effect of Valeric Aldehyde, 275

*Ranella antiqua*, Vred., 44
*Ranella promensis*, Vred., 44
*Ranella tuberculatis*, Noet., 42
Refinery Plant, Thermo-dynamics and Design, 481-486
Refining of Oil, Europe, Progress in 1926, 537-546
Progress in 1926, 517-530
Thermo Dynamics of, 332, 481-486
United States, Progress in 1926, 530-537
Residues, Progress in 1926, 587-592
Resorcinal, Effect on Ignition of Petrol, 279
Retort, Low-temperature, Experimental, 160
Settings for, 158, 162
Reviews :—
"Chemical Engineering and Chemical Catalogue," Ed. by D. M. NEWITT, 341
"Chemische Technologie de Organischen Vergindungen," by Dr. R. O. HERZOG, 490-491
"Coal, Investigation of Caking Power of," by J. T. BURDEKIN, 341
"Coal, Methods of Analysis," DEPT. OF SCIENTIFIC AND INDUSTRIAL RESEARCH, 341
"Coal, Primary Decomposition of," J. G. KING and R. E. WILLGRESS, 342
"Die Automobile Treibmittel des In-u. Auslandes," by Dr. E. SEDLACZEK, 147
"Fuel for Motor Transport," by DEPT. OF SCIENTIFIC AND INDUSTRIAL RESEARCH, 876
"Gewinnung von Erdöl," by G. SCHNEIDERS, 875
"Igneous Rocks, Petrology of," by F. H. HATCH and A. K. WELLS, 489-490
"Lubrication and Lubricants," by L. ARCHBUTT and R. M. DEELEY, 491-492

Reviews—*continued*
"Low Temperature Carbonisation," by C. H. LANDER and J. F. SHAW, 341
"Lancashire Coalfield: The Ravine Seam," by FUEL RESEARCH BOARD, 758
"Oil and Fluid Flow and Heat Transfer in Pipes, Bibliography of," by J. B BUTLER, 342
"Oil and Retortable Material," by G. W. HALSE, 756-757
"Oil-shales of the Lothians," by R. G. CARRUTHERS, W. CALDWELL, E. M. BAILEY and H. R. J. CONACHER, 757
"Petroleum Development and Technology in 1926," by AMER. INST. MIN. MET. ENG., 875
"Report of Fuel Research Board, 1925," by DEPT. OF SCIENTIFIC AND INDUSTRIAL RESEARCH, 148
"Report of Tests on Freeman Multiple Retort," by DEPT. OF SCIENTIFIC AND INDUSTRIAL RESEARCH, 148
"Rosendale Anticline, Geology of," W. B. WRIGHT, etc., 875-876
"Subject Index to Periodicals, 1922," by LIBRARY ASSOCIATION, 148
"Successful Asphalt Paving," by P. J. M. LARRANAGA, 147-148
"Terciario Carbonifero de Antioquia, Estudio Geologico del," by DIETRICH REIMER, 487-489
"Wassersperrabeiten bei Bohrungen auf Erdöl," by B. SCHWEIGER, 757-758
Rhodamine, Effect on Ignition of Petrol, 279
*Rimella Javana*, Martin, 44, 49
*Rimella Promensis*, Vred., 44, 49
*Ringicula Turrita*, Martin, 44
Ropes, Wire, 462-474
Bending Test Results, 470, 473
Cable-laid, 464
Causes of Wear, 467-468
Concentric Strand, 464-465
In Rumania, 468-470
Flattened Strand, 465
Lang's Lay, 463, 473-474
Lay of, 471-472
Lock Coil, 465-466
Measurement of, 466
Non-flexible Type, 465
Uncoiling of, 466-467
Rubidium, Effect on Ignition of Petrol, 247
Ruhr, Cannel Coal, Calorific Value of, 360
Rumania, Kerosine, Analysis of, 398
Wire Ropes in, 468-470
Russia, Kerosine, Analysis of, 398

San Jose de Amen, Ecuador, Mud Volcano of, 460
San Vincente, Ecuador, Mud Volcano of, 459
Santa Elena Peninsula, Ecuador, Geology of, 424-461
Sarawak, Oilfield of, 650
Saybolt Testing Lamp, 403-404, 405-407
Scandium, Effect on Ignition of Petrol, 247
Schulze Distillation Process, 534-535
*Scylliorhinidæ*, Squalene in, 4
*Scymnorhinus Lichia*, Liver Oils of, 2
Squalene in, 4
Selenic Diethyl, Effect on Ignition of Petrol, 303
Selenium, Effect on Detonation, 121
Effect on Ignition of Petrol, 247, 248
Selenium Diethyl, Effect on Ignition of Petrol, 250
Shallow Oilfields, Study of, 181-206
Silicon, Effect on Ignition of Petrol, 247
Silicon Tetraethyl, Effect on Ignition of Petrol, 303
Silver, Effect on Ignition of Petrol, 247, 249
Singu, Burma, Fauna, 43
Petroleum, Production of, 1918-1925, 27
Sipe Springs Oilfield, Texas, 183-191
*Siphonalia Iravadica*, Vred., 42
Sodium, Effect on Ignition of Petrol, 247, 248
Somaliland, British, Petroleum Prospects in, 653
South Africa, Cannel Coals in, 664-665
Petroleum Prospects in, 654
Spinacene, 2
*Spinacidæ* Sharks, Liver Oils of, 2
Squalene, 2
Berginisation of, 5-8
Chemical Nature of, 3-4
Distribution of, 4-5
In Fish Liver Oils, 12-13
*Squalidæ* Sharks, Liver Oils of, 2
*Squalus Mitsukurii*, Liver Oils of, 2
Strontium, Effect on Ignition of Petrol, 247
Sudan, Petroleum Prospects in, 653

Sulphanilic Acid, Effect on Ignition of Petrol, 279
Sulphate Value Test, 771
Sulphuric Acid, Action on Olefines and Alcohols, 844-854
Sumatra, Lignite from, 347-348
*Surcula Feddeni*, Noet., 41, 42, 43, 46, 47
*Surcula Karenaica*, Noet., 44
*Surcula Scala*, Noet., 44
Synthetic Fuels, Progress in 1926, 597-601

Tagaing, Burma, Oilfield of, 28
Petroleum, Production of, 1914-1921, 29
Tang-*i*-Tikab, Persia, Bitumen at, 321
Tanks, Oil Storage, Steel, 135-146
Tantalum, Effect on Ignition of Petrol, 247
Tashan, Persia, Bitumen at, 321
*Tellina Grimesi*, Noet., 48
*Tellina Hilli*, Noet., 49
*Tellina Pseudohilli*, Noet., 49
Tellurium, Effect on Detonation, 121
Effect on Ignition of Petrol, 247
Tellurium Diethyl, Effect on Ignition of Petrol, 250, 303
*Terebra Myuros*, Vred., 48
*Terebra Noetlingi*, Vred., 42, 48
*Terebra Protoduplicata*, Noet., 44
*Terebra Protomyuros*, Noet., 44, 48
*Terebra Quettensis*, Vred., 43, 47
*Terebra Samaranga*, Martin, 44, 48
Tetrahydrobenzene, Effect on Ignition of Petrol, 278
Tetrahydronaphthalene, Effect on Ignition of Petrol, 278
Tetraline, Refraction and Dispersion of, facing 414
Texas, Deep Creek Oilfield, 191-196
Kerosine, Analysis of, 398
Oil Indications in, 333-339
Sipe Springs Oilfield, 183-191
Thallium, Effect on Ignition of Petrol, 247, 248
Thorium, Effect on Ignition of Petrol, 247
Thymol, Effect on Ignition of Petrol, 279
Igniting Temperatures of, 258
Tin, Effect on Detonation, 121
Effect on Ignition of Petrol, 247, 248
Tin Tetraethyl, Effect on Ignition of Petrol, 250, 303
Titanium, Effect on Ignition of Petrol, 247
Toluene, Effect on Ignition of Petrol, 278
Igniting Temperatures of, 258, 262
Igniting Temperatures and H.U.C.R., 270
Refraction of, 413
Refraction and Dispersion of, facing 414
Toluidine, Effect on Ignition of Petrol, 276, 279
Toluolene Diamine, Effect on Ignition of Petrol, 280
Torbanite, Examination of, 352
Trimethylethylene, Aniline Point of, 798
Trimethyl Ethyl Methane, Physical Constants of, 810
Trinidad, Oilfields of, 650
Petroleum Prospects in, 719-720
Progress in 1926, 609-611
Triphenylmethane, Effect on Ignition of Petrol, 278
Triphenyl Methylamine, Effect on Ignition of Petrol, 280
Triphenyl Methyl Bromide, Effect on Ignition of Petrol, 279
*Tritonidea Martiniana*, Noet., 42, 46, 47
*Tritonium Dubium*, Noet., 42
*Trivia Noetlingi*, Vred., 42
Tungsten, Effect on Ignition of Petrol, 247
Turner Valley, Alberta, Progress in 1926, 607-608
Turpentine, Effect on Ignition of Petrol, 278
*Turritella Augulata*, Sow., 43, 44, 47, 48
*Turritella Leiopleurata*, Noet., 44
*Turritella Lyddekeri*, Noet., 44
*Turritella Magnasperula*, Sacco, 42, 43, 46, 47
*Turritella Noetlingi*, Vred., 44
Twingon, Burma, Oil Reserves of, 27.

Uganda, Petroleum Prospects in, 653-654
United States, Cretaceous Oilfields, Indications of, 336-337
Motor-cars, Number of, 102
Pennsylvanian-Ordovician Oilfields, Indications of, 337-338
Permian Oilfields, Indications of, 337
Tertiary Oilfields, Indications of 333-336
Unsaturateds, Separation by Bromination, 801
Separation by Mercuration, 799-800
Sulphuric Acid Action on, 311-320

Uranium, Effect on Ignition of Petrol, 247

Valeric Acid, Effect on Ignition of Petrol, 279
Igniting Temperatures of, 259, 262
Valeric Aldehyde, Effect of Lead Tetraethyl on Ignition, 251
Effect on Ignition of Petrol, 279
Igniting Temperatures of, 259, 262
Surface Effect, 261
Vanadium, Effect on Ignition of Petrol, 247, 249
Vapour, Formation of, 550-552
Fractionation of, 552
Vapourization Processes, U.S. Patents in 1926, 561-563
Vaseline, From Grosny Oil, 589-590
*Vasum Basilicum*, Mich., 43
*Vicarya Verneuili*, d'Arch., 43, 47, 48
Vienna Lamp Burner, 365
*Voluta Ringens*, Noet., 42
*Volvaria Birmanica*, Noet., 42

Waihoek, Transvaal, Cannel Coal from, 349-351
Water, in Wells, Analysis of, 475, 477
Cementing of, 476-477
Tests for Source, 476
Water Drive, Use of, in 1926, 495
Water Problems, Oil and Gas Field, 475-480
Water Shut-off, 476-480
Weber Photometer, 372-373
"Welch" Lamp Burner, 399
Wells, Oil, flowing, Control of, 742-755
Surveying of, 493
Whitby, Jet from, 345
Wire Ropes. See *Ropes, Wire*
World, Crude Oil Production, 1926, 615-616
Deepest Well, 500-501

Xylene, Aniline Point of, 798
Effect on Ignition of Petrol, 278
Igniting Temperatures of, 258, 262
Igniting Temperatures and H.U.C.R., 270
Refraction and Dispersion of, facing 414
Xylidine, Effect as Antiknock, 277
Effect on Ignition of Petrol, 276, 280
Igniting Temperatures of, 258, 262

Yenangyat, Burma, Oilfield of, 27-28
*Paracyathus Caeruleus* Fauna, 41-42
Petroleum, Production of, 1917-1925, 26
Yenangyat-Singu, Burma, Oilfield of, 26-27
Yenangyaung, Burma, Petroleum, Production of, 1918-1925, 28
Yenanma, Burma, Oilfield of, 29-30
Petroleum, Production of, 1922-1926, 30
Yethaya, Burma, Oilfield of, 28
Petroleum, Production of 1914-1925, 29

*Zameus Foliaceus*, Squalene in, 4
*Zameus Squamulosus*, Squalene in, 4
Zinc, Effect on Ignition of Petrol, 247 248, 249
Zinc Diethyl, Effect on Ignition of Petrol, 303
Zirconium, Effect on Ignition of Petrol, 247

# ABSTRACTS

Arranged by

W. H. THOMAS, A.R.S.M.

*Abstractors :*

S. F. BIRCH, Ph.D., D.I.C., A.I.C.
R. W. L. CLARKE, B.Sc.
S. W. COOKE, B.Sc.
P. DOCKSEY, B.A.
H. S. GARLICK, B.Sc., A.I.C.
J. E. MARSHALL HALL, A.R.S.M.
W. N. HOYTE, B.A.
R. P. LINSTEAD, Ph.D., D.I.C.
H. MOORE, M.Sc., A.I.C., F.C.S.
X. NORMAND.
W. S. NORRIS, Ph.D., D.I.C., A.I.C.
R. PITKETHLY.
K. B. ROSS, B.A., B.Sc.
G. SELL.
H. G. SHATWELL, Ph.D., M.Sc.
E. R. B. SKIPWORTH, B.A.
A. R. STARK, B.Sc.
W. H. THOMAS, A.R.S.M.
T. WISKIN.

## ABSTRACT INDEX

Numbers refer to Abstract numbers. P denotes Abstract of Patent Specification.


Absorption Oil, Cooling of, 128
Absorption Plant (P), 427, 654
Acid Resin, Neutral Bitumens from (P), 158
Acid Sludge, By-product recovery, 686
Acid-treated Products, Purifying of (P), 431
Acidity of Dark Oils, Determination of, 316
Active Carbon (P), 414, 530
  Urbain Process, 407
Aero Engine Fuels, 3
Air Lift, Principles governing, 382, 488
Alberta, Tar Sands, Gasoline by Cracking, 599
Alcohol Fuels, 659
Alcohols, Catalytic Preparation of (P), 471
  From Olefine Gases (P), 127
  From Petroleum, 123
  From Water Gas, Equilibrium Conditions, 502
  Industrial, Use in Oil Refining, 643
  Synthesis and Separation of (P), 515
Aliphatic Acids, Effect on Surface Tension of Heavy Hydrocarbons, 284
American Petroleum Institute, Standardization of Specifications, 740-750
Amines, Aromatic, Resinous Products from (P), 513
Amyl Acetate, from Natural Gasoline, 288, 289
Amyl Alcohol, from Gasoline, 292
Analysis, Volumetric, Hydrogen Ion Estimation, 320
Aniline, Effect on H.U.C.R. of Petrol, 3
Anti-detonation, 598
Anti-Detonators, Metallic Colloids as, 81
Anti-knocks, 217-218
  Action of, 349
  Analytical Measuring of, 228
  Gasoline Values, 350
  Influence in Gas-ion Oxidation, 225
  (P), 725
  Quantitative Testing, 727
Appalachian Field, Geology of, 494
Arkansas, South-western, Oil-bearing Rocks of, 394
Aromatics, Naphthalene Solubility in, 125
Asphalt, Finely divided (P), 37
  German and Mexican compared, 555
Asphalt Saturant (P), 689
Asphaltum Content of Mineral Oil, Determination of, 317
Australia, Oil and Gas Prospects, 264
Autoxidation, Hot Liquid Fuels, 598
Autoxidation of Oil, Reduction of (P), 683
Azerbaidjan, Russia, Oil Industry of, 7, 14

Baku, Russia, Impossibility of Increasing Production, 6
  Oil Production, 7, 9, 11, 14, 16, 19
  Programme for 1926-27, 18
  Progress in, 639
  Prospecting in, 16
Barium Sulphate, Coalescence of Precipitate, 318
Belts, A.P.I. Specifications, 744
Benzene, Effect on H.U.C.R. of Petrol, 3
  From Phenolic Vapours (P), 432
Benzine, "Index Number" Valuation, 171

Benzol, Removal from Gases (P), 300
Berekei, Russia, Oil Region of, 113
Bibi-Eibat, Russia, Utilization of Bay, 12
Binder Pitch (P), 38
Bitumen, Neutral, from Acid Resins (P), 158
Bituminous Emulsions, 313
(P), 157, 443, 444
Bituminous Paint (P), 561
Bituminous Road Material (P), 315
Boiler Plate, Embrittlement of, 345
Boilers, Oil-field, A.P.I. Specifications, 748
Boiling-Point Elevation, Electrical Apparatus for, 46
Bolivia, Petroleum Resources of, 645
Bottom Settlings, Distillation of (P), 183
Brown Coal, Generator Tars, Cracking of, 352
Brunler Flame, Application of, 348
Bubble Cap Towers, Construction of, 51

California, Absorption Gas Plant, 131
Natural Gas Developments, 490
Canada, Shale-oil, Gasoline by Cracking, 599
Cannel Coal, Hydrogenation of, 115
Carbon, Active, Manufacture of (P), 65
Engine, Effect on Detonation, 726
Carbon Black, 441
Carbon Monoxide, Synthesis of Paraffins, 650
Carbon Monoxide-Hydrogen Mixture, from Hydrocarbons (P), 509
Carbon-Ratio Theory, 491
Carbon Removal from Still (P), 461
Carboxylated Compounds, Light Hydrocarbons from (P), 514
Casing, Corrosion in, 329
Elevator (P), 106-107
Catalysts (P), 483
Regeneration of (P), 516
Caustic Soda Treatment of Oil, Prevention of Emulsions (P), 33
Centrifugal Separators, 590
Centrifuge (P), 716
Chemistry of Petroleum, Researches in, 649
Chlorine Processes, Tin Recovery, 119
Chromium, in Oil and Automotive Industry, 584
Clays, Decolorising, Water Treatment of, 675
Cleaning Oils, Refining of, 554
Cleaning Spirit, Clarification of, 154, 155, 159
Coal, Analysis Methods, 163
Ash Content Determination, 693
Coal—*continued.*
Calorific Value Determination, 693
Carbonising of (P), 769
Composition of, 406
Geology of, 269
High-pressure Refining of, 764
Hydrocarbons from (P), 635, 636
Hydrogenation of, 115
Liquid Hydrocarbons from (P), 768
Lubricating Oil from, 309
Oxidising of (P), 411
Steam Distillation (P), 770
Coal Gas, Benzene from (P), 637
Separation of Saturateds and Unsaturateds, 410
Coal Tar, Chlorinated Derivatives, Preservative Properties of, 644
Low-temperature, Cracking of, 353
Coal Washing (P), 272
Coal-oil Mixture, Distillation of (P), 276, 277
Coke-ovens, By-product Recovery (P), 638
Coking Still (P), 332
Colombia, Oil Developments in, 121
Oil Geology of, 397
Colorado, Salt Domes of, 395
Colorimeter, 698
Colour, Measurement of, 696
Colour Apparatus (P), 178, 700
Columns, Rectifying, Laboratory, 321
Compression, Isothermal and Adiabatic, 585
Condensation of Vapours (P), 331
Condensers (P), 704
Contact Filtration, 666
Halloysite for, 539
Contact Refining (P), 520
Cordage, Manilla, care of, 102
Cordilleran Geosyncline, Relation to Petroleum, 266
Corrosion, Control of, 715
Distillation Plant, 571
in Gasoline Manufacture, 50
in Plant, 328, 329
in Stills, Ammonia for, 182
Metal, Water Treatment to Prevent, 417
Refinery Problem, 52
Vapour Phase Water Bath, 574
Cracked Distillates, Refining of (P), 87, 90
Sulphuric Acid Reactions, 602
Cracking Equipment, Corrosion in, 231
Cracking of Petroleum, 82
Control System (P), 462
Corona Discharge Effect, 232
Equilibrium Control, 728
Gases from, Treatment of (P), 621
in Kellogg Pipe Still, 234
Liquid Phase, 351

Cracking of Petroleum—*continued.*
(P), 83, 84, 86-89, 91-97, 236-252, 355-380, 472-481, 486, 602-623, 730-739
Richey Process, 233
Scraper for Stills (P), 85
Still for (P), 235
Cresol, Effect on H.U.C.R. of Petrol, 3
Crank-case Oil, Reclaiming of, 144, 146
Crank Cases, Acids in, 678
Crude Oil, Cleaning of (P), 421
Desulphurising of, 652
Distillation of (P), 522
Formolite Analysis of, 170
Purification of 517
(P), 757
Wax Separation, 438
Cyclic Hydrocarbons (P), 512
Cylinder Oil, Volatilisation and Carbonisation of, 437
Cylinder Stocks, Steam Refined, 547

Dehydration of Petroleum (P), 57, 64, 68, 104, 519
Dehydrogenation, Catalytic (P), 484
Demulsification of Oil (P), 333, 336, 685
Dephlegmator (P), 58
Derricks, A.P.I. Specifications, 741
Concrete Corners, Standards for, 254
Steel, A.P.I. Standards, 99
Destructive Distillation (P), 273-277
Desulphurisation of Cracked Motor Fuels, 280
Desulphurising of Petroleum, 652
(P), 55, 69, 664
Detonation, 467
Causes of, 220
Dopes and, 217, 218
Engine Carbon Effect, 726
Measurement of Characteristics, 221
Mechanism of, 216
Diesel Engine, Solid Injection, Effect of Gas on, 78
Working Costs, 1925-26, 73
Diethyl Sulphate, use in Examination of Oils, 21
Dimethyl Cyclopentane, Oxidation of, 505
Distillation of Petroleum, Fractional (P), 56, 185
Low-pressure, 669
(P), 54, 56-61, 63, 67, 150, 183, 184, 187, 188, 191, 194, 197, 198, 575, 577, 579, 580, 706-713
Plant, Corrosion in, 571
Vacuum, Laboratory Apparatus, 566
Dispersion of Solids in Liquids (P), 723, 724
Distillation of Tar (P), 412, 413, 493
Dopes, and Detonation, 217, 218
Dopplerite, Occurrence of, 762
Doulton Stoneware Centrifugal Pump, 202
Drilling and Pumping Rig, 389
Drilling Apparatus (P), 627
Drilling Engine, Diesel, 388
Drop Number, Emulsifiability and, 562

Earth, the, Mobility of, 265
Eislingen Shale-Oil, Examination of, 631
"Elbog" Method of Locating Oil, 381
Emba, Russia, Oil Production Jan.-March 1926, 8
Progress in, 641
Emulsifiability, Drop Number and, 562
Emulsifying Agents (P), 633
Emulsions, Bituminous, 313
(P), 157
Field Treatment of, 256
Resolving of (P), 681
Separation of (P), 259-262, 392, 521, 755, 756
Engine, Diesel, for Drilling, 388
High Revolution, 343
Internal-combustion, Combustion in, 226
Developments in, 341
Electrically Operated Valves, 74
Fuel Characteristics and Starting, 296
Induction Currents, 347
Light Weight, 203
Optical Combustion Indicator, 77
Pinking in, 227
Use of Heavy Oil (P), 466
Variable Compression, 464
Natural Gas, Isothermal and Adiabatic Compression, 585
Estonia Oil-shale Industry of, 763
Ether-air Mixtures, Flame Propagation in, Pressure Effect on, 230
Ethyl, Effect on H.U.C.R. of Petrol, 3
Ethylene, Hydrogenation of, 500
Explosions, Gaseous, Detonation Mechanism, 216
Gaseous, Fuel Constitution Effect, 214
Gaseous, Pressure Rise, 215
Extraction Apparatus, Continuous, 322
Evaporation, Reduction of, 456

Fats and Oils, Splitting of (P), 442
Filter (P), 593, 595

Filter Plant, Contact, 145
Flame, Movement of in Hydrogen-Air Mixtures, 224
Movement in Closed Vessels, 222-224
Propagation, in Ether-air, Pressure Effect on, 230
In Methane-air Mixtures, 219
Flash-Point, Apparatus for, 447
Flow Meter, 204
Flowing Wells, Pressure Control in, 386
Fluid Separator (P), 460
Fluids, Movement in Porous Solids, 112
Fluorescent Oils (P), 314
Fractional Distillation, 694
Fractionating Column, 702, 703
Design Equations, 572
Laboratory, 167
Fractionation, 179, 180
Developments in, 326
(P), 338-339
France, Petroleum Definitions, 497
Freeman Multiple Retort, Tests on, 114
Friction and Lubrication, Researches on, 32
Fuel Economiser (P), 665
Fuel Oil, Economic Position of, 120
Gasifying of, 82
Residual, Burning of, 303
Fuel Research Station, 408
Fuels, Aero Engine, 3
Analysis of, 695
Nitrogen Estimation, 168
Synthesis of, 729
Fuller's Earth, Acid Treatment of, 674
Furnace (P), 581, 583

Gas, Casing-Head, Absorption and Distillation (P), 291
Coal, Light Oil from (P), 290
Measurement of, 457
Natural, Chemical Composition of, 423
Compressed, Handling Technique, 130
Gasoline Extraction (P), 23
Helium Extraction, 424
Helium in, 286
Light Oil from (P), 290
Methane Extraction, 526
Sulphur Recovery, 129
Specific Gravity Determination, 451
Volume by Slide Scale, 525
Gas Equilibria, Velocity of, 506
Gas Flow, through High Pressure Lines, 342
Gas Lift, in Texas, 253, 383
Pressure Control, 625
Gas Lift—*continued.*
Principles of, 488
Results in Santa Barbara, 101
Gas Oil-Fuel Oil Blend, Road Oil, 556
Gas Pumps, 588
Gas Well, Open Flow, Standardizing of, 751
Gaseous Explosions, see *Explosions, Gaseous*
Gaseous Mixtures, Catalytic Combustion of (P), 324
Gases, Dissociation of (P), 529
Ignition of by Flames, 229
Mixed, Separation of (P), 133
Sulphuretted Hydrogen Removal (P), 656
Gasoline, Amyl Alcohol from, 292
Anti-Knock Values, 350
Blended, 531
Casing-Head, Separation of (P), 132
Clay Treatment of, 293
Composition of, 22
Extraction from Natural Gas (P), 23
Hydrocarbons in, 429
Manufacture of (P), 301
Corrosion in, 50
Natural Gas, Absorption Oil from, 422
Absorption Plant, 131
Amyl Acetate from, 288, 289
Aviation Spirit, 528
Charcoal Plant (P), 134
Extraction Methods, 527
(P), 655
Pressure Regulation, 425
Temperature Control, 524
Vapour Characteristics, 653
Refining of (P), 138
Specification, Changes, 26
Meaning, 135
Sweetening of, 302
Tests, Analytical and Engine, 137
Used, Reclaiming of (P), 533
Gasometers, Sealing Material (P), 688
Gauges, A.P.I. Specifications, 742
Geological Distillation of Petroleum, 628
Geology, Petroleum, Advances in, 759
Present Conditions of, 393
Geophysical Methods, 403
In Mexico, 400
Germany, Asphalt, Compared with Mexican, 555
Glaucosil, Purification Agent, 416
"Goldebrough" Cracking Process, 82
Greases, 557
Grosny, Russia, Crude Oil, Acidity of, 316
Oil Production, 8, 10, 15
Petroleum of, 258

Grosny, Russia—*continued*..
Progress in, 640
Solar Oil, Contact Substances from, 559
Grosny-Tuapse Pipe-Line, Russia, 642
Gulf Coast, Salt Domes in, 401
Gypsum, Dehydration of, 111

Halloysite, for Contact Filtration, 539
Heat Exchanger (P), 582
Heat Insulation, 201
Heat Regulator (P), 211, 213
Heat Transfer, Graphical Method for, 714
(P), 212
Alignment Charts, 208
Heating, High Temperature (P), 717-721
Helium, Extraction of, 424
In Natural Gas, 286
Hexahydroaromatics, Volumetric Determination of, 41
Hydrocarbon Mixtures, Purification of (P), 511
Hydrocarbons, Diethyl Sulphate in Examination of, 21
Heavy, Aliphatic Acid Effect on Surface Tension, 284
Sulphur Monochloride Action on, 283
Hydrocarbons and Methanol, Syntherizing of (P), 285
Hydrogen-air Mixtures, Flame Movement in, 224
Hydrogenation, 469
Hydrogen Recovery from Waste Gases (P), 116
(P), 117, 618, 623
Hydrogenation of Petroleum (P), 482, 485
Hydroxylated Compounds, Light Hydrocarbons from (P), 514
Hypochlorite, Dibasic Calcium, Stabilising of, 651

Induction Currents, 347
Insecticides, Lubricating Oils as, 544
Insulating Oil, 672
Researches on, 545
Insulating Waxes, Moisture and Electrical Properties, 687
Internal Combustion Engines. See *Engines, Internal Combustion.*
Iodine Colour of Petroleum Products, 323
Iso-Vis Lubricants, 143

Japan, Natural Gases, Sedimentary, 399

Keadby, Lincolnshire, Report on Tank Barge Explosion, 1
Kellogg Pipe Still, Cracking in, 234
Kentucky, Structure Relation to Production of Oil and Gas, 493
Kerosine, Sweetening of, 302
Kjeldahl Digestion Apparatus, 166
Knock. See *Detonation.*

Lamp, Oil, Automatic Vacuum, 434
Leach Fracto-condenser, 702
Lead Tetraethyl, Reactions of, 122
Lightning, Protection from, 209, 210, 586
Lockport, Louisiana, Drilling in Swamp, 752
Low Pressure Sands, Production Losses in, 624
Low Temperature Carbonisation, 632, 761, 766
Freeman Multiple Retort, 114
Hydrocarbons in Gas, 409
(P) 765
Turner Plant, 405
Low-temperature Oil, Utah, 271
Lubricant (P), 552
Stopcock, 569
Valuation of, 548
Lubricating Oils, Arizona Halloysite for Contact Process, 539
as Insecticides, 544
Blended, Flash-points of, 177
Bloom Measurement, 43
Carbon Deposits of, 440
Colour in Acid Stage, 311
Constitution and Synthesis of, 312
Contact Filtration, 145, 666
Corrosion of Steel, 31
Cylinder, Volatilisation and Carbonisation of, 437
Deterioration of, 142, 667
Iso-Vis, 143
From Coal, 309
Laboratory Tests and Engine Results, 306
Manufacture of (P), 148, 149
Microanalysis of, 307, 308
Motor, 671
Pyrogenation of, 668
Refining of (P), 550, 553
Researches on, 545
Sulphuric Acid Action, 668
Tests on, 448

Lubricating Oils—*continued.*
Tests on Splitting "Dumps," 673
Treatment with Ozone, 30
Used, Purifying of (P), 29, 35, 551, 684
Lubrication, 305, 540
Fundamentals of, 680
Lubrication and Friction, Researches on, 32
Lubrication Hydrocarbons, Saturation of, 282
Lubrication Properties, Testing of (P), 452

Manilla Cordage, Care of, 102
Manometer, Low Pressure, 564
Measuring Apparatus, Liquid (P), 592, 594
Melting Point, Determination of, 568
Metal Alloys, Use in Oil Industry, 415
Metals, Corrosion of, 165
Intercrystalline, 344
Meter, Flow, 204
Petrol Consumption (P), 592
Methane, Conversion to Carburant (P), 737
Treatment of (P), 426
Methane-air Mixture, Flame Propagation in, 219
Methanol and Hydrocarbons, Synthesizing of, (P), 285
Methyl Alcohol, Motor Fuel, 24
Methyl-aniline, Effect on H.U.C.R. of Petrol, 3
Mexico, Asphalt, Compared with German, 555
Geophysical Methods in, 400
Light Crude, Refining of, 281
Microcombustion, Organic, 45
Mineral Fields, Location of, 268
Mining for Oil, 753, 754
Moisture Content of Oils, 676
Molecular Weight, Determination of, 563
Montana, Drilling and Casing Rules, 487
Motor Fuels, 430, 657, 658
Alcohol, 659
Characteristics of and Engine Starting, 296
Cracked, Desulphurisation of, 280
Explosives added to, 297
Filtering of (P), 139
Future, 295
Methyl Alcohol as, 24
Modern, 25
(P), 28, 433, 470, 535, 660-662
Solid Residue Determination, 40

Motor Fuels—*continued.*
Starting Abilities Compared, 532
Starting Property Determination, 136
Unsaturated Determination, 40
Volatility, 428
Determination of, 40
Increasing of, 80
Mud, Rotary Drilling, Heavy Minerals for, 385

Naphtha, Cracked, Sulphuric Acid Treatment, 294
From Pipe Still, 156
Naphtha Solutions, Corrosive Influence of Sulphur, 501
Sulphur Compounds in, Action of Agents on, 647
Sulphur Determination, 691
Naphthalene, Solubility in Aromatics, 125
New Brunswick, Shale-Oil, Gasoline by Cracking, 599
New Guinea, Oil Search in, 398

Oil, Generation by Geologic Distillation, 402
Geology of, 269
Oil Reservoirs, Fluid Delivery Principles, 255
Oil Sand, Flooding with Alkaline Solutions, 100
Oil Recovery (P), 53
Oil-bearing Strata, Microscopic Correlation of, 267
Oil-Shale, Geology of, 269
Olefine Gases, Alcohols from (P), 127
Olefines, Silent Discharge Action, 499
Ore Concentration (P), 272
Organic Compounds, Hydrogenation, 469
Organic Liquids, Temperature Effects of Mixing, 160
Organic Microcombustion, 45
Orifice Flow Meter, Slide Rule for, 589
Origin of Petroleum, Organic, Data in Favour, 279
Research on, 758
Outages, Measuring of, 327
Overshots (P), 105
Oxidation of Hydrocarbons, Low-Temperature 503
Oxidation Products, Preparation of (P), 126
Oxygenated Compounds, Catalytic Preparation of (P), 471
Light Hydrocarbons from, 514

Palestine, Oil and Gas Possibilities, 396, 492
Panhandle, Texas, Gas-lift in, 253, 383
Paraffin, Impregnating Wood with, 2
Liquid (P), 36
Synthesis from Carbon Monoxide, 550
Paraffin Base Oil, Dewaxing of, 542, 679
Paraffin Wax, 310
Berginisation of, 648
Cracking of, 601
Crystallisation of, 541
Determination of, in Crude Wax, 174
Heat of Solution of, 543
Oil Determination, 42
Recovery of (P), 153
Refining of (P), 34
Scale Separation, 151
Specific Gravity of, 175
Separation of, Avoiding Shock Chill (P), 152
Solubility of, 546
Sweating Regulator (P), 549
Patent Office, Procedure (United States), 496
Patents, Chemical, Law of, 118
Pecos, Oilfield of, 630
Petrol, Consumption Indicator (P), 592
Petroleum, Hexahydroaromatics Determination, 41
Petroleum Wax, 310
Phenol, Effect on H.U.C.R. of Petrol, 3
Phenolic Vapour, Benzene from (P), 432
Phenols, Mixed (P), 510
Pinking in Internal Combustion Engines, 227
Pipe-Lines, Bituminous Coatings for, 76
Pipe, A.P.I. Specifications, 745
Pipe-Lines, Corrosion in, 329
Pipe Still, Kellogg, Cracking in, 234
Pitch, Binder (P), 38
Binding for Electrodes, 558
Softening Point Determination, 164
Pitch Residue, Distillation of (P), 560
Pollution, Oil, Prevention of, 206
Polymerisation of Oil (P), 459
Potash, from Dry Oil Wells, 384
Pump, Centrifugal, Characteristics of, 72
Doulton Stoneware, 202
Gas, 528
Petrol, Kerbside, 465
Pumping Equipment, A.P.I., Specifications, 750
Pumping of Wells, Counterbalancing in, 463
Hubbard Oil Head Method, 489
Radioactivity, Aid to Search for Oil, 760
Rectifying Columns, Laboratory, 321
Recycling, Elimination of Wild Fractions by, 287
Refineries, Chemical Control at, 162
Corrosion in, 328
Refinery Piping, Isometric Maps of, 325
Refining of Cracked Distillates (P), 87, 90
Refining of Petroleum, 663
Industrial Alcohol for, 643
(P), 27, 34, 62, 66, 71, 141, 147, 186, 193, 199, 298-301, 334, 335, 337-339, 435, 523, 534, 536-538, 576, 578, 660, 662, 682
Process Steam, 570
Ryan Process, 573
Regulator, Gas, 454
Residual Fuel Oil, Burning of, 303
Residual Oil Products, Producing (P), 54
Richey Cracking Process, 233
Road Bitumen (P), 315
Road Oil, Gas-Fuel Oil blend as, 556
Rotary Drilling Equipment, A.P.I. Specifications, 747
Russia, Baku-Batoum Pipe-line, 16
Mineral Resources of, 5
Oil Industry and State, 4
Oil Production, 8, 13, 17
Ryan Refining Process, 573
Sand, Oil, Flooding with Alkaline Solutions, 100
Recovery of Oil (P), 53
Tar, Cracking of Bitumen from, 98
Santa Barbara, California, Gas Lift Results, 101
Saturated Cyclic Hydrocarbon, Oxidation of, 505
Saybolt Thermo-Viscosimeter, Flow Conditions in, 449
Sealing-Piston (P), 597
Selenium Diethyl, Influence in Gas-ion Oxidation, 225
Separators, Centrifugal, 590
Shale-Oil, Cracking of, 600
Gasoline by Cracking, 599
Silica Gel, 646
Desulphurising Efficiency of, 140
Metallized, Catalytic Activity of, 500
Sinai Peninsula, Oil and Gas Possibilities, 396, 492
Slop Wax, 310
Sludge, Products from (P), 705
Sludge Acid, Recovery of, 181, 186

Sludge Residue, Cracking of (P), 615
Snelling Cracking Process, 728
Sodium Hypochlorite, Solid (P), 507, 508
Solid Fuel, Distillation of (P), 767
Solids, Dispersion in Liquids (P), 723, 724
Solvent Oils, Refining of, 554
Solvents, Removal of Suspended Matter (P), 418-419
Specific Heat of Oil, 453
Spindletop, Texas, Crude Oil, Cracking of, 354
Spray, Oil, Research on, 587
Spudding Shoe (P), 108
Steam, Process, in Oil Refining, 570
Steel Fractures, Interpretation of, 207
Stills, Carbon Removal from (P), 461
  Corrosion in, Ammonia for, 182
  Cracking, Scraper for (P), 85
  Heating of (P), 200, 581, 583
  Laboratory, 567
  (P), 180, 181, 192, 194
  Sediment Removal (P), 70
  *See* also *Tube Still*
Stopcock Grease, 569
Strata, Folding or Shearing, 270
Sucker Rods, Design of, 387
  Selection of, 743
Sulphur, Recovery from Natural Gas, 129
Sulphur Determination, Rapid Method for, 47
Sulphur Dioxide-Oil Mixture, Extraction of $SO_2$ gases (P), 458
Sulphur in Oil, Detection of, 692
  Waters Method, 690
Sulphur Monochloride, Action on Hydrocarbons, 283
Sulphuretted Hydrogen, Elimination from Gases (P), 656
Switch Oil, Examination of, 304
Synthesis of Petroleum, 20

Tar, Hexahydroaromatics determination, 41
Tar Sand, Cracking of Bitumen from, 98
Tank Barge "Two Sisters," Report on Explosion on, 1
Tank-Cars, Outage Measurements, 327
Tanks, Oil-storage, A.P.I. Specifications, 746
  Corrosion in, 329
  Petrol, Fire Prevention in (P), 79
Tar, Coal, *See Coal Tar*
Tar, Distillation of (P), 412, 413, 495
Tar Products, Improvement of (P), 420
Tasmania, Oil-Shales of, 404
Tests, Oil, U.S. Bureau of Standards, 450
Tetraphenyl Lead, Preparation of 504
Texas, Gas-Lift in, 253, 383
Thermo Regulator, 446
Thermometers, Differential (P), 722
Tiflis-Gandja, Russia, Oil Region of, 110
Tin Recovery in Chlorine Processes, 119
Tintometer (P), 178
Titrations, Potentiometric, 697
Toluene, Effect on H.U.C.R. of Petrol, 3
  Purification of, 565
Toluidine, Effect on H.U.C.R. of Petrol, 3
Tool Joints, Cable, A.P.I. Specifications, 749
Tools, Drilling, Hard Materials for, 257
Towers, Absorption Coefficients, 591
  Bubble Cap, 51
Transformer Oil, Examination of, 304
  Stability of, 677
  Valuation of, 670
Tube Still, Pennsylvania Crude Distillation, 701
  Regulation of (P), 195, 196
Turbine, Exhaust Gas, 75
Turbine Oils, Examination of, 304
  Valuation of, 176
Turner Low-Temperature Carbonisation Plant, 405
"Two Sisters," Tank Barge, Report on Explosion on, 1

United States, Bureau of Standards Oil Tests, 450
  Over-production Aspect, 498
Unsaturateds, Catalytic Preparation of, 124
  Isomeric, Estimation of, 109
Ural-Emba, Russia, Oil Area of, 109
Urbain Active Carbon, 407
Utah, Coal, Low-temperature Oils from, 271
  Salt Domes of, 395

Vacuum, High, Gauge for, 319
Vacuum Distillation, Separation by (P), 330
  Laboratory Apparatus, 566
Valves, Flue Passage (P), 596
Vapour, Enrichment Fundamentals, 455

Vapour Phase Water Bath, Lessens Corrosion, 574
Vapour Pressure, Dynamic Method for, 172
Vapours, Treatment of (P), 331
Variable Compression Engine, 205, 464
Vegetable Matter, Decomposition of, 620
Venezuela, Crude Oils of, 518
  Geological Developments in, 278
Ventura, California, Age of Miocene Oil, 263
Viscometer (P), 699
Viscometry, Flow Conditions in Saybolt Thermo-Viscosimeter, 449
Viscosity, Determination of (P), 48, 49
  Significance of, 173
  Temperature Changes, 44
Volumetric Analysis, Hydrogen Ion Estimation, 320

Water, Oil Field, Analysis of, 390, 391
  Softening of, Lime for, 346
Water Analysis, 161
Water Content of Oil, Determination of, 39
Water-proofing Materials (P), 689
Wax, Amorphous, Extraction of, 445
  Isolation from Crude Oil, 438
Waxes, Petroleum, 310
Well Spacing, Effect on Fluid Delivery, 255
Wells, Boring Apparatus (P), 626
  Oil, Control of Gas Lift, 625
  Restoring Pressures with Air, 103
  Raising liquids from (P), 627
"White Oil" Reaction, 439
Wietze, Crude, Asphaltum Content of, 317
Wild Fractions, Elimination of, 287
Wire Rope, A.P.I. Specifications, 740
Wood, Impregnating with Paraffin, 2
Wood Preservation, Chlorinated Coal Tar Derivatives for, 644

Xylene, Effect on H.U.C.R. of Petrol, 3
Xylidine, Effect on H.U.C.R. of Petrol, 3

# INDEX.


Acenaphthene, Effect on Ignition of Petrol, 278
Acetaldehyde, Effect of Lead Tetraethyl on Ignition, 251
Effect on Ignition of Petrol, 279
Effect of Petrol-lead Tetraethyl, 274
Igniting Temperatures of, 258, 259, 262
Surface Effect, 261, 262
Acetaldehyde-Petrol, Igniting Temperatures of, 271
Acetaniline, Effect on Ignition of Petrol, 280
Acetic Anhydide, Effect on Ignition of Petrol, 279
Acetone, Effect as Antiknock, 277
Effect on Ignition of Petrol, 276, 279
Igniting Temperatures of, 258, 262
Acetophenone, Effect on Ignition of Petrol, 279
Acetyl diphenylamine, Effect on Ignition of Petrol, 280, 303
Acetylene, Effect of Lead Tetraethyl on Ignition, 252
Igniting Temperatures of, 260, 262
Acetylene Tetrabromide, Effect on Ignition of Petrol, 279
Acridine, Effect on Ignition of Petrol, 279
"Adlake" Lamp Burner, 399
Aesculin, Effect on Ignition of Petrol, 279
Air Drive, Use of in 1926, 496
Air Lift, Use of in 1926, 494
Alberta, Tar Sands, Utilisation of, 683-688
Alcohol, Effect of Lead Tetraethyl on Ignition, 251
Igniting Temperature, Surface Effect, 261, 262
Igniting Temperatures and H.U.C.R., 270
Sulphuric Acid Action on, 849-854
Alcohol-Petrol, Igniting Temperatures of, 271
Aldehyde Ammonia, Effect on Ignition of Petrol, 280
Aldehydes, Effect on Ignition of Petrol, 279
Aliphatic Hydrocarbons, Refraction of, 413
Aluminium, Effect on Ignition of Petrol, 247, 248
Aluminium Triethyl, Effect on Ignition of Petrol, 303
8-Aminoquinaline, Effect on Ignition of Petrol, 280
Amylalcohol, Effect of Lead Tetraethyl on Ignition, 251
Effect on Ignition of Petrol, 279
Igniting Temperatures of, 259, 262
Amylene, Refraction of, 413
Refraction and Dispersion of, facing 414
*m*-Amylene, Aniline Point of, 798
Amylene Hydrate, Effect of Lead Tetraethyl on Ignition, 251
Igniting Temperatures of, 259, 262
Analysis of Oil, Progress in 1926, 595-597
Ancon, Ecuador, Geology of, 442
Aniline, Effect as Antiknock, 277
Effect on Ignition of Petrol, 276, 279, 303
Igniting Temperatures of, 258, 262
Effect of acetaldehyde, 275
*m*-Anisidine, Effect on Ignition of Petrol, 280
*o*-Anisidine, Effect on Ignition of Petrol, 280
*p*-Anisidine, Effect on Ignition of Petrol, 280
Anisole, Effect on Ignition of Petrol, 279
Annual Dinner, Ninth, Speeches at, 825-843
Annual General Meeting, Fourteenth, 214-223
Annual Report of Council, 1926, 207-213
Anthracene, Effect on Ignition of Petrol, 278
Anthraquinone, Effect on Ignition of Petrol, 280
Anti-Detonators, Progress in 1926, 578-581
Antiknock, Effect of Metallic Vapours as, 244-255
Oxidation of, 254-255
Theories of, 281-299
Antiknock Dopes, 300-307
Antimony, Effect on Ignition of Petrol, 247, 248
Arakan Coast, Burma, Oilfields of, 30
*Area Bistrigata*, Noet., 46
*Area Burneai*, d'Arch., 49
*Area Thaiahibi*, Noet., 49
Argand Lamp, 364,365
Aromatics, Sulphuric Acid Action on, 311-320
Arsenic, Effect on Ignition of Petrol, 247
Asphalts, Progress in 1926, 587-592
Assam, Oilfield of, 649-650